

AMENDMENT TO THE CLAIMS:

This listing of the claims replaces all prior versions, and listings, of claims in the application.

1 1. (Cancelled)

1 2. (Currently Amended) A system for transferring control and data
2 information between a host and daughtercard, with the daughtercard providing the
3 functionality of interfacing the host to a network, and with the daughtercard including
4 memory, and with the daughtercard for processing and formatting network data received
5 from the network and processing and formatting data received from the host prior to
6 transmission on the network, said system comprising:

7 a low-speed, legacy parallel bus for coupling the host with legacy
8 daughtercards utilizing only a parallel interface to exchange information between the
9 motherboard and legacy daughtercard and with the low-speed, legacy parallel interface
10 utilized to perform low-bandwidth data exchanges between the motherboard and a non-
11 legacy daughtercard coupled the low-speed, legacy parallel bus;

12 a high bandwidth serial link coupling the host and non-legacy daughtercard;
13 on the host:

14 a host serial communication controller for transmitting and
15 receiving data over the serial link;

16 a host processor programmed to implement a serial messaging
17 protocol for transmitting commands and data to the non-legacy
18 daughtercard, over the serial link, including a write memory command
19 that writes data to the memory on the daughtercard and a read memory
20 command that identifies data to be read from the memory on the non-
21 legacy daughtercard;

22 on the non-legacy daughtercard:

23 a daughtercard serial interface for transmitting and receiving
24 data over the serial link;

25 a daughtercard protocol controller programmed to implement a
26 serial messaging protocol to respond to commands received from the host, including

27 responding to memory read and write commands and for forwarding formatted data received
28 from the network to the host.

1 3. (Original) The system of claim 2 where the daughtercard protocol
2 controller is a field programmable gate array (FPGA).

1 4. (Original) The system of claim 2 where the daughtercard protocol
2 controller is an application specific integrated circuit (ASIC).

1 5-9. (Cancelled)

1 10. (Currently Amended) A method for managing an intelligent
2 daughtercard, with the daughtercard including memory, by a host comprising:
3 ~~The method of claim 9 where the step of defining memory management~~
4 ~~serial commands further comprises the steps of:~~
5 providing a serial link between the host and daughtercard;
6 defining a plurality of serial protocol commands forming a serial protocol
7 enabling daughtercard management operations to be performed utilizing the serial link;
8 where the step of defining a plurality of serial protocol commands further
9 comprises:
10 defining memory management serial protocol commands for enabling
11 the host to manage memory on-board the daughtercard; and
12 defining application dependent serial protocol for enabling the host to
13 initialize and/or change the configuration of the daughtercard;
14 where the step of defining memory management serial protocol commands
15 further comprises:
16 defining memory management serial protocol commands for
17 initializing and/or updating data structures resident in daughtercard memory;
18 and
19 defining memory management serial protocol commands to manage
20 and/or update packet buffers with network data; and
21 specifying a command encapsulation format to encode the plurality of
22 commands to implement the serial protocol.

1 11. (Original) The method of claim 10 where the step of defining application
2 dependent serial protocol commands includes the steps of:

3 defining application dependent serial command for
4 initialization and/or configuration of the daughtercard to correspond to user initiated
5 initialization and/or configuration changes performed by a user at the host.

12-13. (Cancelled)

1 14. (Currently Amended) A system for managing an intelligent daughtercard,
2 with the daughtercard including memory, by a host comprising: The system of claim 13
3 where the means for defining serial protocol commands forming a serial protocol further:
4 means for providing a serial link between the host and daughtercard;
5 means for defining a plurality of serial protocol commands forming a serial
6 protocol enabling daughtercard management operations to be performed utilizing the serial
7 link;
8 where the means for defining a plurality of serial protocol commands further
9 comprises:

means for defining memory management serial protocol commands for enabling the host to manage memory on-board the daughtercard; and means for defining application dependent serial protocol for enabling the host to initialize and/or change the configuration of the daughtercard; and means for specifying a command encapsulation format to encode the plurality of commands to implement the serial protocol.

1 15. (Original) The system of claim 14 where the means for defining memory
2 management serial commands further comprises:

3 means for defining memory management serial protocol
4 commands for initializing and/or updating data structures resident in daughtercard memory;
5 and
6 means for defining memory management serial protocol
7 commands to manage and/or update packet buffers with network data.

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1 16. (Original) The system of claim 15 where the step of defining application
2 dependent serial protocol commands comprises:

3 means for defining application dependent serial command for
4 initialization and/or configuration of the daughtercard to correspond to user initiated
5 initialization and/or configuration changes performed by a user at the host.

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17. (Cancelled)